## **CLAIMS**

Please amend the presently pending claims as follows:

## 1. (Cancelled)

- 2. (Currently Amended) Cellular radiotelephony signal The synchronization process according to claim 19, the structure of the principal channel being organized in frames, wherein the determined time  $(t_0)$  on the principal channel is a beginning of a frame of the principal channel.
- 3. (Currently Amended) Cellular radiotelephony signal The synchronization process according to claim 2, wherein the beginning of each frame of the principal channel forms a respective one of the determined times  $(t_0)$ .
- 4. (Currently Amended) Cellular radiotelephony signal The synchronization process according to claim 2, wherein the beginning of only some frame(s) of the principal channel called synchronization frames forms a respective one of the determined times  $(t_0)$ .
- 5. (Currently Amended) Cellular radiotelephony signal The synchronization process according to claim 4, wherein the principal channel and / or the supplementary channel transmit(s) identification information of at least one synchronization frame.
- 6. (Currently Amended) Cellular radiotelephony signal The synchronization process according to claim 19, the principal channel having a structure organized in frames each including a plurality of slots, wherein the determined time ( $t_0$ ) on the principal channel is a beginning of a slot of the principal channel.
- 7. (Currently Amended) Cellular radiotelephony signal The synchronization process according to

- claim 6, wherein the beginning of only some slot(s) of the principal channel called the synchronization slots, forms a respective one of the determined times  $(t_0)$ .
- 8. (Currently Amended) Cellular radiotelephony signal The synchronization process according to claim 7, wherein the principal channel and/or the supplementary channel transmit(s) identification information of at least one synchronization slot.
- 9. (Currently Amended) Cellular radiotelephony signal The synchronization process according to claim 19, the principal channel having a structure organized in frames each comprising a plurality of slots, each slot comprising a plurality of signal units (chips), wherein the determined duration of said time interval ( $\Delta t$ ) is equal to k times the duration of a signal unit, where k is an integer number.
- 10. (Currently Amended) Cellular radiotelephony signal The synchronization process according to claim 9, wherein k is equal to 256.
- 11. (Currently Amended) Cellular radiotelephony signal The synchronization process according to claim 19, wherein the principal channel and/or the supplementary channel transmit(s) information about said duration of the time interval ( $\Delta t$ ).
- 12. (Currently Amended) Cellular radiotelephony signal The synchronization process according to claim 19, wherein the principal channel and/or the supplementary channel transmit(s) information about a rank within a frame of the structure of the supplementary channel, a subframe for which the beginning may be detected, so as to enable synchronization of the supplementary channel at frame level by detecting the beginning of the next frame as a function of said synchronization at sub-frame level and said information about the rank of said sub-frame.
- 13. (Currently Amended) Cellular radiotelephony signal The synchronization process according to

- claim 12, wherein the principal channel and/or the supplementary channel also transmit(s) information about a mode of transmitting sub-frames on the supplementary channel, said synchronization at frame level of the supplementary channel also depending on said information about the transmission mode.
- 14. (Currently Amended) Cellular radiotelephony signal The synchronization process according to claim 19, wherein the principal channel uses a spectrum spreading access (CDMA) technique.
- 15. (Currently Amended) Cellular radiotelephony signal The synchronization process according to claim 19, wherein said supplementary channel uses a multicarrier technique based on an OFDM modulation or an IOTA modulation.
- 16. (Currently Amended) Cellular radiotelephony signal The synchronization process according to claim 19, wherein the principal channel firstly transmits a notification prompting said terminal to perform said synchronization of the supplementary channel at sub-frame level, to swap the terminal from the principal channel to the supplementary channel.
- 17. (Currently Amended) Cellular radiotelephony signal The synchronization process according to claim 16, wherein said notification comprises information about said duration of the time interval ( $\Delta t$ ) and / or said determined time ( $t_0$ ) on the principal channel.
- 18. (Currently Amended) Cellular radiotelephony signal The synchronization process according to claim 16, wherein said notification is transmitted to a paging channel included in said principal channel.
- 19. (Currently Amended) <u>A synchronization Synchronization</u> process for a supplementary channel associated with a symmetric two-directional principal channel, <u>said supplementray</u> channel and said symmetric two-directional principal channel being implemented by a same base

## station,

said symmetric two-directional principal channel comprising a principal uplink channel and a principal downlink channel, particularly for low or medium speed transmission of signalling and control data and information, said supplementary channel being assigned to the downlink only, particularly for transmission of data at high speed, making use of a multicarrier technique for distribution of data in the time/frequency space, and with a sub-frame type structure, wherein the process comprises synchronizing the supplementary channel at sub-frame level, wherein synchronizing includes the following steps:

- a) detecting a determined time (t<sub>0</sub>) on the principal downlink channel; and
- b) obtaining the beginning of a sub-frame of the supplementary channel, by offsetting the determined time ( $t_0$ ) detected in a) by a time interval with a determined duration not equal to zero ( $\Delta t$ ).
- 20. (Currently Amended) The synchronization process Process according to claim 19, wherein said duration of the time interval ( $\Delta t$ ) and t or said determined time ( $t_0$ ) on the principal downlink channel is (are) fixed and known to a terminal at which said synchronization process is performed.
- 21. (Currently Amended) The synchronization process Process according to claim 19, wherein said duration of the time interval ( $\Delta t$ ) and  $\ell$  or said determined time ( $t_0$ ) on the principal downlink channel is (are) variable, and the principal downlink channel and/or the supplementary channel transmit(s) information about said duration of the time interval ( $\Delta t$ ) and  $\ell$  or said time ( $t_0$ ).
- 22. (Currently Amended) <u>The synchronization process Process</u> according to claim 19, wherein it includes a preliminary step in which a notification is transmitted through the principal channel prompting a terminal to perform said step of synchronizing at sub-frame level of the supplementary channel, so as to swap the terminal from the principal channel to the supplementary channel.

- 23. (Currently Amended) <u>A terminal Terminal</u> of a cellular radiotelephony system, said terminal comprising:
  - a transmitter for transmitting a principal uplink channel,
  - a receiver for receiving a principal downlink channel, said principal uplink and said principal downlink forming a symmetric two-directional principal channel particularly for low or medium speed transmission of signalling and control data and information, and
  - a receiver for receiving at least one supplementary channel, said supplementary channel being assigned to the downlink only, particularly for transmission of data at high speed, making use of a multicarrier technique for distribution of data in the time / frequency space, and with a sub-frame type structure, and
  - a synchronizer, which synchronizes the supplementary channel at sub-frame level, wherein the synchronizer detects a determined time  $(t_0)$  on the principal <u>downlink</u> channel and obtains the beginning of a sub-frame of the supplementary channel, by offsetting the detected time  $(t_0)$  by a time interval with a determined duration not equal to zero  $(\Delta t)$ .
- 24. (Currently Amended) A base Base station of a cellular radiotelephony system, including:
  - a receiver, which receives a principal uplink channel,
  - a transmitter, which transmits a principal downlink channel, said principal uplink channel and said principal downlink channel forming a symmetric two-directional principal channel particularly for low or medium speed transmission of signalling and control data and information,
  - a transmitter, which transmits at least one supplementary channel, said supplementary channel being assigned to a downlink only, particularly for transmission of data at high speed, making use of a multicarrier technique for distribution of data in the time / frequency space, and with a sub-frame type structure,

means of offsetting the beginning of at least one sub-frame of the supplementary channel, by a time interval with a determined duration not equal to zero  $(\Delta t)$  from a determined time  $(t_0)$  on the principal <u>downlink</u> channel, so as to enable synchronization of the supplementary channel at sub-frame level, in a terminal, by detection of said determined time  $(t_0)$ , and adding said time interval  $(\Delta t)$ .